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—Photo by S.P. Shahi





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## Status of Wild Life in Bihar

BY

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Two books written in the twenties describe the mammalian fauna of Central India as it existed some 50 years back. Dunbar Brander wrote his well known book "Wild Animals in Central India" in 1923. Captain Forsyth in 1919 published his notes on the forests, its wild tribes and natural history of the territory now covered by the State of Madhya Pradesh, in his book "The Highlands of Central India". A picture of the past faunal wealth of the southern Indian States is obtained from Sanderson's "Thirteen years among the wild beasts of India" published in 1890. No such literature is available for Bihar, neither perhaps for the entire eastern region, from which one could get an authoritative glimpse into the faunal incidence of this State over the last 100 years.

Stray references however' here and there confirm the belief that the State was as rich in its wild life as the neighbouring adjacent forests of Madhya Pradesh.

Haines, who published his classic work on the Botany of Bihar and Orissa (1921), mentions of Walter Hamilton (1820) who described the district of Singhbhum as in a very "savage state being composed of rugged hills, uninhabited jungles surrounded by forests infested with wild beasts". Hamilton found the rivers and water swarming with fish, reptiles and alligators.

Speaking of the Rajmahal Hills (Santal Paraganas) Haines (1921) mentions of the terrible destruction of the forests which contained wild Elephants and Rhinoceros in a period described as "comparatively recent times". The destruction of forests of the Rajmahal hills by the twenties of the present century was so complete and the habitat ruined to such an extent that these majestic animals appear to have become extinct from here by the turn of the present century.

Arthur Musselwhite mentions of the shooting of a white tiger in the Lechuar jungle by the then Maharaja of Gidhaur. This forest is located in the Jumui sub-division of Monghyr district which I had occasions to visit in my capacity as D.F.O, Monghyr—some 20 years back. Sal trees had vanished and so its various associates and the forests when taken over by Government round 1950 consisted only of "euphorbea" indicative of the retrogression that had taken place over years of mismanagement. The valuable forest had been cut and habitat completely ruined—rendering the area unsuitable for the bigger mammalian fauna.



In 1940, an English man had shot in Sasaram forest, a white leopard. Black leopards are known but not white ones—probably a freak of nature.

Just as the hills and plains of Rajmahal abounded with rhinoceros, so did the tracts of Purnea with wild buffaloes. Herds of these handsome beasts used to roam in the Katihar sub-division of Purnea district until the end of the last century. A few solitary animals survived around 1920. Both the rhinoceros from Rajmahal and wild buffaloes from Purnea are now extinct. They are in fact, extinct from the whole State.

The Gaur (*Bos gaurus*) popularly known as bison, occurred in the Simdega sub-division in the Ranchi district and is recorded to have been shot by an Army Officer in 1883. It has now completely vanished from this district. This handsome beast is now confined to two localities only with a population of some 200 animals only over an area of a thousand sq. km.

Lydekker recalls of railway accident on the night of September 28, 1882 of Bengal-Nagpur UP Mail (now South-Eastern Railway). While travelling at a speed of 30 miles an hour it colided with an elephant. between Goilkera and Manoharpur on a pitch dark night. Remains of the elephant found dead next morning were that of a big bull with a tusk 6' long. Such tuskers are now rare although elephant is the one such species which has continued to survive and adore some areas of Bihar forests even to-day. About hundred of them reside in two exclusive forest areas in Singhbhum and Palamau.

One of the handsomest creatures in the wild is the black buck. The leap of its does is beautiful beyond belief. This animal lived gregariously in herds of thousand in the forests of Champaran and Shahabad. Their habitat was open grassy lands with occasional trees in the upper canopy. Most of these uplands have been brought under the plough and the Buck has vanished from the Bihar forests although happily not entirely yet from its territory. A small population in some riverine area of Shahabad is fighting its last battle of survival. A pair of male bucks and three does rescued from this last refuge brought to Patna Botanical Garden appear to have adopted to its thirty-acre enelosure well. The three does have given birth to a fawn each recently.

Besides the vanished Black Buck (*Antelope cervicapra*) the other antelopes found in Bihar forests are the Nilgai (*Bosecaphus tragocamelus*), chowsingha or four-horned Antelope (*Tetraceros quadricornis*) and the chinkara or the Indian gazelle (*Gazella bennetti*). As it is, India is poor in its variety of antelopes. Africa is essentially its home. Antelopes do not exist in the New World. The number of known species and sub-species of antelopes is great. There are about 170 in Africa (Odhams) compared to only four in the Bihar forests. The Eland, Greater kudu, bongo, bushbuck, impala hartebeests and others have made the African forests famous in the world. It is unfortunate that while we are poor in the varitey of antelopes, the few that exist lead a precarious existence.



The Nilgai (Blue bull) is the largest antelope of the Indian forest. Lydekker mentions that Eland and Kudu (now confined to Africa) as testified by their fossil remains, were the companions of Nilgai on the plains of Northern India. Survival of Nilgai can to some extent be attributed to its being regarded as a near relation to sacred cow. The Nilgai outside its forest habitat displays remarkable unconcern at the presence of man because of the immunity it has so far enjoyed from molestation. A year or two back, a couple of these animals very nearly collided at dusk time against an Indian Airlines Viscount on the runway at Patna aerodrome and the airport was closed to night landing. The forest dwelling ones are however, very wary and take to flight at the sight of man. The Nilgai has been described as an ungainly-looking animal, of no trophy value. Recently I saw a pair of male bulls with their excellent blue shiny coat and girrafe-like gait galloping fast enough in the Hazaribagh National Park—the sight was as magnificent any.

Chow-singha or the four-horned antelope is the only four-horned animal of this tribe in the World. The only other wild four-horned ruminant the world possessed was the Sivatherium of the Siwalik Hills which is now extinct (Lydekker). Unlike the black buck, the Chow-singha is not gregarious in habit and prefers to lead a solitar existence. It is therefore, not often that one encounters them in the forests. They are occasionally seen in the forests of Palamau and Hazaribagh and are now extinct from the rest of the forests of the State.

The Chinkara is the only gazelle still available in Bihar forests. Its distinguishing feature is that both sexes unlike black buck and Nilgai are furnished with horns. In the deer and antelopes usually the males have antlers and horns. These small and slender animals are invariably seen in small parties of two to four individuals over the Kaimur Plateau of Shahabad even in day time especially during summer months under shady trees. Their speed in flight is great and before you can get near them, they race at great speed. Poaching over the Plateau has considerably reduced their number. The Plateau is a sanctuary created especially to save this animal. There is pressure from certain political quarters to release a part of this Sanctuary. The species will vanish if this pressure succeeds. The plateau is its last hold.

Of the deer tribe those that occur in Bihar are the cheetal (*Axis axis*), sambhar (*Cervus unicolor*), muntjac or the barking deer (*Muntiacus muntjak*) and Hog-deer (*Hyelaphus porcinus*). Grace and beauty of our deer and sambhar stags with antlers are matched only by their counterparts of the New World like moose, reindeer and caribou. Africa which is so rich in its antelopes knows deer only in some regions north of the Atlas Mountains. Wallace, a British naturalist explorer, pointed out that the species of animals were not spread at random through the world but that each major region had its own zoological character. There is a much greater similarity in the fauna of Eurasia and North America because these continents until quite recently were connected by a landbridge



across the present Bering Strait. Australia has been isolated by a sea barrier from the main land of the old world for many millions of years, hence the survival of its ancient mesupial fauna (*Carrington*). It is therefore, not surprising to find members of the deer tribe in Asia and North America as also the ox-tribe gaur (India) and Bison (America). These animals are absent from Africa and Australia.

The four members of the deer family particularly cheetal and sanbhar were at one time the most abundant animals covering the entire forest area of the State. They were the two the most prominent constituents of the forest biomass—the flora and fauna existing in perfect harmony—a hundred years back. Destruction of forests principally and persistent hunting and mass slaughter has now confined the deer tribe only to certain forests in the districts of Singhabhum, Hazaribagh and Palamau comprising 25% of our forest area. These two animals described as “integral component of Indian jungle scenery” no longer survive in major part of our forests.

The biggest concentration of cheetal is in the Betla National Park where about six hundred of them are now living and increasing their number steadily. Hazaribagh National Park is the main stronghold of Sambhar where nearly four hundred reside in safety. The Saranda Division in Singhbhum is the next best home of Sambhar after Hazaribagh.

The story of tiger (*Panthera tigris*) seems to complete the faunal tragedy that is threatening to overtake us in Bihar and possibly elsewhere, also in India.

The ancestral home of the tiger is believed to be the northern part of Soviet Russia. In its march across Asia via the Caucasus it seems to have travelled through South-East Asia to Malaya, Burma and then to India. Stracey feels it could not have travelled direct south to India because of the Sinkiang desert and the mighty Himalayas. According to Gee however, the tiger travelled to India directly south from Northern Asia through Assam. Whatever route the tiger took it is commonly believed to have come to this country some six thousand years back—a comparatively recent immigrant. It has taken over 150 million years for mammals to evolve from reptilian stock and it is unfortunate that in such a short time it should be now on the verge of extinction.

This priceless noble animal—Late M.D. Chaturvedi one of the most celebrated Forest Officers in the country and at one time India's Inspector-General of Forests wrote “there cannot be a price tag on tiger”—which occupied all major forest types of India is now on the run. It is fighting with its back to the wall. An idea of its past abundance is had from the number of animals shot by individuals, as quoted by Schaller. Maharaja, Udaipur shot one thousand tigers during his life time while Maharaja, Surguja whose forests adjoin our Palamau forest has 1150 tigers to his credit (or discredit). There are quite a few individuals who in the late nineteenth and early twentieth centuries have shot 200 to 300 tigers each.



According to Gee (1964) the tiger population in India now is about 4000 contrasted with a possible 40,000 fifty years ago. It can be assumed safely that the tiger population in Bihar too has decreased in the same proportion over the last fifty years.

I do not think there are more than fifty or so tigers left in Bihar, and these are confined in small population in the districts of Hazaribagh, Palamau and Champaran over nearly 10,000 sq. km. of forest area, i.e. in one third of the total forest area of the State. It has vanished from the other two third.

Alarmed at the precarious status of the tiger the International Union for Conservation of Nature which is akin to U.N.O. for Nature Conservation, recommended a moratorium on tiger killing for 5 years. This ban has recently been accepted by all States. Bihar was one of the first States to do so. I must, however, confess, for want of an effective law, it has not reduced poaching to the extent desired. The district of Champaran adjoining the Nepal forest would have been, for instance, the single largest home for this much persecuted magnificent animal but the prosperous farmers residing close to the forest boundary have been shooting them in the cane-brakes where the tiger from Nepal have of late been coming in larger number seeking refuge in Indian territory, as the adjoining sal valley in Nepal is being cleared for settlement purposes. As I write, a tiger shot a few days back in Latehar sub-division of Palamau district, has been paraded in broad day light in this sub-divisional town on 26th March, 1971. The usual defence is that the animal had killed his buffalo and that he was shot on the villager's own land.

There has been agitation from Shikar agents also, against this ban. In answer to such agitation, the I.U.C.N. in a statement from their head-quarters in Switzerland have highlighted the hitherto unappreciated fact that nowhere in India, there is perhaps a genetically viable tiger population capable of maintaining itself adequately. The statement says "To maintain a genetic pool of sufficient variety in a population of animals like the tiger, it is essential that a contiguous population totalling at least 300 head exists. All known tiger population in India are, as far as available information goes, of a such smaller number, and the areas separating these small remaining populations are of such a nature as to be absolutely prohibitive to regular genetic exchange between them. Hence the estimated number of two to four thousand tigers still existing in All India is misleading since no single population is large enough to maintain a healthy stock". Although the basis of 300 tigers is not clear from the statement the reason advanced is worthy of very serious consideration.

With about 50 tigers spread over 10,000 sq. km. of forests in three districts, one being the other side of the Ganges, the situation in Bihar is much more precarious than perhaps in U.P. and Madhya Pradesh. No exchange of population can occur between the species in Palamau with those in Champaran or Shahabad.

The I.U.C.N. statement further adds "furthermore, legalised hunting is, to a large extent, trophy-hunting, and trophy-hunting has a deteriorating effect on the quality of the population especially if this is very small. A striking example of how trophy-hunting can



affect a population of animals which is otherwise not threatened by extinction is provided by the African elephant. Tusks which would have been regarded as practically substandard seventy years ago rank as exceptionally fine in the present-day population." Cheetal and Sambhar carry antlers. These are mainly weapons for "intraspecific combat" between stags for the possession of the herd. These are also used in defence of territory, or for the leadership within a herd consisting of more than one male. In an "intraspecific combat" the stronger male wins over the weaker ones and propagate the quality of the race. Hunting these prized animals defeats the noble purpose for which such combats in the nature of wrestling bouts take place.

What is true of tiger is also true of sambhar, cheetal and gaur, the three wellknown wild animals of our forests.

Except for the sambhar in about 1000 sq. km. of forest in Singhbhum and Hazaribagh and the cheetal in 200 sq. km. in Palamau, gaur and elephant over 1000 sq. km. in Singhbhum and Palamau, no other wild animal in any other forest area in the State is in sufficient number as to constitute a genetically viable population. None of our Shooting Block or Blocks (if contiguous for exchange of population) can qualify for remaining open for hunting for another 5 years. There has to be in my view a minimum of 20 males and 60 females of each of the ungulate species before an area can be permitted to be hunted.

The total forest area in the State is 31,000 sq. km. A major portion of this is dry peninsular Sal (*Shorea robusta*). Sal (*Shorea robusta*) is the climatic climax species. Considerable area of these forests were subjected until 20 years back to ruthless unscientific cutting by local inhabitants as these belonged to private owners.

As a result of protection and other development measures subsequent to the nationalisation of these forests, quite a substantial area have been rehabilitated and the habitat has once more become fit abode for wild animals. The two National Parks and Sanctuaries whose total area is 2,650 sq. km. forms only 8% of the total forest area. Many of these sanctuaries do not have adequate wild life.

The need now is to select compact Blocks of 10 to 15 sq. miles of these rehabilitated forests with minimum of human and cattle population and to re-stock these areas by introducing species which existed in them a century back. The species which breeds abundantly and adopts itself to quite a variety of habitat, is our cheetal (*Axis axis*). It was introduced, for exemple, in the And mans some 20 years back where it has bred very successfully in the dense evergreen forests of that island. It never existed there before.

Field level staff of the Forest Department have to be trained in the art of introducing wild animals, Cheetal to begin with, in such forest areas.

Needless to add that such areas will have to be more intensively managed. The domestic cattle will have to be inoculated. Small water retention dams will have to be



constructed to enable the introduced species to have adequate water during the summer months of February to June when usually water becomes scarce in these deciduous forests.

These efforts to be effective will have to be supported by a wild life wing within the Forest Department manned by men trained in the science of wild life management (as distinct from mere protection). They must, for instance, know the technique of animal census in forest condition, and be able to assess the adequacy or otherwise of food and water for both the herbivorous and carnivorous.

Above everything, there has to be an effective Wild Life Act covering the entire territory of the State. The issue is, will Government legislate timely or shall we miss the bus and lose what little is left of this national heritage ?

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The Indian Appeal continues to press for an Ordinance against the trade in tiger and leopard skins, in all states. The case has been strengthened by the fact that a person recently caught at Calcutta airport smuggling out 15 leopard and 9 tiger skins, with two baby Clouded Leopards, heavily drugged, in a tiny suitcase. This person has been accused and fined by the Calcutta courts. A similar 'grab' was made at Santa Cruz airport in Bombay on 21st March, when leopard skins were discovered with some Spanish Nationals. Much valuable work in uncovering skin-smuggling has been done by Mrs. Anna Wright, the Eastern Representative of INA and a member of Wild Life Preservation Society of India.